

has a slight naked strip above the nostrils, as in the Sheep, but there is no fissure of the upper lip.

Extinct Families of Artiodactyla.

The origin of the Artiodactyla is placed by Cope in the family Pantolestidae,¹ allied to the genus *Protogonodon* of the Condylarthra. As, however, this family is represented by but a few back teeth and a fragment of the hind-foot, it seems premature to regard it as the necessary starting-point of the Bunodont and Ruminant groups.

Fam. Antilraeotheriidae. — This well-known and ancient family consists of creatures of for the most part a Pig-like form, with teeth approaching the selenodont shape, and a complete dentition. The carpals, tarsals, metacarpals, and metatarsals are well developed. The toes are four (or five) to each foot, with the outermost beginning to be reduced. These of course are all generalised and primitive characters, pointing nowhere in particular, except, of course, to an Artiodactyle stock, on account of the teeth and the two predominating toes.

The type genus of the family, *Antilraeotherium*, is not, as its name might seem to denote, a relic of the Carboniferous period; its remains were found in lignite, which may also show that it was at least semi-aquatic in habit. Its form, however, must have been. Pig-like, so at least one would presume from the elongated skull and shortish legs. There were species as great as a *Bamboceros*, and smaller forms. The genus began in the Eocene and continued down to the Pliocene. It is known from Europe, Asia, and America.

The skull is long with a prominent sagittal crest. The facial part is also very long, and the orbits are not closed by a bony ring. The premolars are simple teeth; the molars are distinctly bunodont with a tendency in one or two to the selenodont condition. The canines are powerful, as are also the incisors. The scapula has been specially compared with that of the Camel. It has no acromion, which is usually absent in Ungulates. An ally of the present animal, for instance, the Hippopotamus, has the acromion developed,

he radius and ulna, the tibia and fibula, are all fully developed.

*** Ttie name *Triywwlgstes* has to be substituted**